附表1 东阿拉善地块叠布斯格杂岩中黑云斜长片麻岩锆石稀土元素分析结果（10-6）

Apppendix table 1 Rare earth compositions of zircons from the Diebusige biotite-plagioclase gneiss（10-6）

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 样品点 | 类型 | La | Ce | | Pr | | Nd | | Sm | | Eu | | Gd | | Tb | | Dy | | Ho | | Er | | Tm | | | Yb | | Lu | | ∑REE | | (La/Yb)N | | Ce/Ce\* | | Eu/Eu\* |
| 14LH05-4.1\_01 | DE | 0.00 | 32.72 | | 0.05 | | 1.00 | | 2.20 | | 0.94 | | 9.43 | | 2.95 | | 35.51 | | 13.05 | | 61.38 | | 13.56 | | | 144.49 | | 27.06 | | 344.33 | | 0.000018 | | 578.22 | | 0.63 |
| 14LH05-4.1\_04 | DE | 0.01 | 51.11 | | 0.08 | | 1.46 | | 3.05 | | 1.45 | | 16.05 | | 4.75 | | 57.65 | | 21.16 | | 103.91 | | 21.77 | | | 246.87 | | 46.63 | | 575.94 | | 0.000017 | | 586.63 | | 0.63 |
| 14LH05-4.1\_10 | DE | 1.13 | 53.61 | | 0.37 | | 3.35 | | 4.04 | | 1.57 | | 17.64 | | 4.79 | | 53.24 | | 18.55 | | 84.25 | | 17.96 | | | 189.92 | | 33.84 | | 484.28 | | 0.004287 | | 20.32 | | 0.57 |
| 14LH05-4.1\_101 | DE | 0.05 | 136.94 | | 0.39 | | 5.57 | | 9.54 | | 3.15 | | 45.94 | | 11.18 | | 135.70 | | 45.15 | | 224.11 | | 46.04 | | | 509.66 | | 92.41 | | 1265.82 | | 0.000074 | | 235.16 | | 0.46 |
| 14LH05-4.1\_110 | DE | 0.02 | 96.38 | | 0.27 | | 2.30 | | 8.27 | | 2.78 | | 31.92 | | 9.07 | | 112.04 | | 38.14 | | 188.48 | | 41.86 | | | 485.51 | | 86.30 | | 1103.34 | | 0.000035 | | 294.26 | | 0.52 |
| 14LH05-4.1\_116 | DE | 0.45 | 28.13 | | 0.70 | | 5.79 | | 5.94 | | 1.79 | | 14.04 | | 2.82 | | 33.58 | | 9.77 | | 46.38 | | 8.64 | | | 101.10 | | 18.06 | | 277.20 | | 0.003196 | | 12.30 | | 0.60 |
| 14LH05-4.1\_118 | DE | 18.74 | 188.26 | | 6.65 | | 41.38 | | 29.15 | | 11.07 | | 109.99 | | 26.40 | | 303.46 | | 96.41 | | 448.34 | | 90.41 | | | 977.80 | | 169.59 | | 2517.63 | | 0.013745 | | 4.14 | | 0.60 |
| 14LH05-4.1\_120 | DE | 0.07 | 113.11 | | 0.67 | | 10.21 | | 19.49 | | 6.42 | | 71.76 | | 16.75 | | 198.02 | | 62.35 | | 291.67 | | 56.79 | | | 662.19 | | 113.91 | | 1623.42 | | 0.000072 | | 130.68 | | 0.52 |
| 14LH05-4.1\_13 | DE | 0.20 | 36.48 | | 0.16 | | 4.05 | | 6.53 | | 2.03 | | 20.80 | | 5.58 | | 60.18 | | 20.22 | | 91.99 | | 19.22 | | | 198.29 | | 39.96 | | 505.69 | | 0.000715 | | 50.40 | | 0.53 |
| 14LH05-4.1\_14 | DE | 0.43 | 55.45 | | 0.53 | | 7.18 | | 10.47 | | 3.60 | | 39.71 | | 10.18 | | 106.31 | | 34.42 | | 151.76 | | 31.15 | | | 326.30 | | 55.84 | | 833.32 | | 0.000950 | | 28.30 | | 0.54 |
| 14LH05-4.1\_15 | DE | 0.04 | 45.98 | | 0.08 | | 1.60 | | 3.54 | | 1.28 | | 17.15 | | 4.66 | | 50.82 | | 18.24 | | 88.67 | | 18.73 | | | 203.27 | | 38.53 | | 492.61 | | 0.000152 | | 186.88 | | 0.50 |
| 14LH05-4.1\_16 | DE | 0.05 | 54.81 | | 0.09 | | 1.51 | | 3.30 | | 1.39 | | 17.74 | | 4.97 | | 56.18 | | 18.26 | | 87.26 | | 18.06 | | | 190.84 | | 34.73 | | 489.18 | | 0.000173 | | 210.73 | | 0.56 |
| 14LH05-4.1\_23 | DE | 0.04 | 43.59 | | 0.09 | | 1.34 | | 2.93 | | 1.26 | | 11.96 | | 3.28 | | 37.17 | | 13.18 | | 70.01 | | 16.35 | | | 204.02 | | 40.02 | | 445.26 | | 0.000138 | | 178.58 | | 0.65 |
| 14LH05-4.1\_24 | DE | 1.30 | 48.67 | | 0.76 | | 4.99 | | 3.56 | | 1.16 | | 12.38 | | 3.80 | | 42.61 | | 14.67 | | 71.20 | | 14.86 | | | 164.04 | | 31.23 | | 415.22 | | 0.005663 | | 12.05 | | 0.53 |
| 14LH05-4.1\_30 | DE | 4.21 | 62.83 | | 0.94 | | 7.04 | | 7.66 | | 2.73 | | 28.95 | | 7.81 | | 81.60 | | 28.18 | | 127.09 | | 25.09 | | | 267.88 | | 51.69 | | 703.70 | | 0.011260 | | 7.76 | | 0.56 |
| 14LH05-4.1\_44 | DE | 0.01 | 43.57 | | 0.13 | | 1.61 | | 2.77 | | 1.23 | | 14.56 | | 3.90 | | 45.09 | | 15.65 | | 73.98 | | 15.98 | | | 165.84 | | 32.34 | | 416.65 | | 0.000043 | | 301.60 | | 0.59 |
| 14LH05-4.1\_47 | DE | 0.02 | 37.85 | | 0.10 | | 1.61 | | 3.26 | | 1.45 | | 13.74 | | 3.23 | | 36.81 | | 12.18 | | 54.73 | | 11.24 | | | 121.71 | | 23.23 | | 321.16 | | 0.000126 | | 200.69 | | 0.66 |
| 14LH05-4.1\_48 | DE | 0.32 | 46.14 | | 0.37 | | 3.35 | | 5.29 | | 2.04 | | 22.41 | | 6.24 | | 65.80 | | 22.73 | | 104.71 | | 22.49 | | | 228.54 | | 44.91 | | 575.34 | | 0.000994 | | 33.18 | | 0.57 |
| 14LH05-4.1\_50 | DE | 1.15 | 39.65 | | 0.58 | | 4.56 | | 4.78 | | 2.51 | | 17.05 | | 4.77 | | 52.71 | | 17.03 | | 77.50 | | 16.23 | | | 169.15 | | 33.22 | | 440.90 | | 0.004895 | | 11.90 | | 0.85 |
| 14LH05-4.1\_55 | DE | 0.01 | 41.18 | | 0.08 | | 1.73 | | 2.93 | | 1.07 | | 13.38 | | 3.69 | | 41.15 | | 14.90 | | 67.59 | | 14.27 | | | 156.77 | | 29.10 | | 387.83 | | 0.000042 | | 377.35 | | 0.52 |
| 14LH05-4.1\_57 | DE | 10.69 | 67.82 | | 2.22 | | 10.71 | | 7.51 | | 2.70 | | 29.68 | | 7.68 | | 83.12 | | 28.04 | | 128.15 | | 26.39 | | | 276.99 | | 48.33 | | 730.01 | | 0.027674 | | 3.41 | | 0.55 |
| 14LH05-4.1\_72 | DE | 2.20 | 154.66 | | 2.98 | | 25.07 | | 26.30 | | 8.77 | | 80.41 | | 19.42 | | 222.33 | | 69.88 | | 335.63 | | 71.27 | | | 864.86 | | 135.77 | | 2019.55 | | 0.001821 | | 14.83 | | 0.58 |
| 样品点 | 类型 | La | Ce | | Pr | | Nd | | Sm | | Eu | | Gd | | Tb | | Dy | | Ho | | Er | | Tm | | | Yb | | Lu | | ∑REE | | (La/Yb)N | | Ce/Ce\* | | Eu/Eu\* |
| 14LH05-4.1\_75 | DE | 0.06 | 169.52 | | 0.59 | | 10.39 | | 22.92 | | 7.70 | | 85.24 | | 22.48 | | 258.56 | | 85.27 | | 400.09 | | 85.03 | | | 970.66 | | 158.39 | | 2276.90 | | 0.000048 | | 214.12 | | 0.53 |
| 14LH05-4.1\_77 | DE | 0.59 | 122.91 | | 0.35 | | 5.63 | | 6.56 | | 2.82 | | 41.72 | | 13.26 | | 176.12 | | 65.36 | | 338.19 | | 75.32 | | | 885.38 | | 160.72 | | 1894.95 | | 0.000477 | | 65.99 | | 0.52 |
| 14LH05-4.1\_78 | DE | 0.04 | 124.52 | | 0.51 | | 7.82 | | 14.83 | | 4.93 | | 60.21 | | 16.84 | | 183.42 | | 60.38 | | 286.90 | | 58.23 | | | 692.86 | | 114.14 | | 1625.65 | | 0.000043 | | 209.39 | | 0.50 |
| 14LH05-4.1\_79 | DE | 2.06 | 103.94 | | 0.65 | | 4.87 | | 5.15 | | 2.54 | | 25.07 | | 7.43 | | 99.74 | | 39.40 | | 212.42 | | 49.19 | | | 634.05 | | 116.44 | | 1302.93 | | 0.002336 | | 22.05 | | 0.68 |
| 14LH05-4.1\_80 | DE | 34.67 | 84.72 | | 8.48 | | 48.44 | | 39.08 | | 7.60 | | 140.65 | | 33.28 | | 295.45 | | 79.39 | | 305.32 | | 53.76 | | | 536.48 | | 76.33 | | 1743.63 | | 0.046353 | | 1.21 | | 0.31 |
| 14LH05-4.1\_81 | DE | 0.17 | 136.66 | | 0.27 | | 8.48 | | 17.72 | | 5.67 | | 57.94 | | 17.66 | | 198.09 | | 70.57 | | 332.73 | | 71.61 | | | 802.78 | | 142.05 | | 1862.41 | | 0.000156 | | 153.24 | | 0.54 |
| 14LH05-4.1\_82 | DE | 0.06 | 129.06 | | 0.48 | | 4.75 | | 11.35 | | 4.15 | | 43.54 | | 12.28 | | 128.83 | | 43.97 | | 220.16 | | 44.55 | | | 515.53 | | 90.10 | | 1248.82 | | 0.000085 | | 184.96 | | 0.57 |
| 14LH05-4.1\_84 | DE | 0.34 | 141.94 | | 0.96 | | 13.94 | | 22.25 | | 7.69 | | 85.48 | | 21.10 | | 248.98 | | 76.64 | | 376.96 | | 74.48 | | | 831.00 | | 142.03 | | 2043.80 | | 0.000292 | | 61.06 | | 0.54 |
| 14LH05-4.1\_88 | DE | 0.04 | 126.31 | | 0.37 | | 5.82 | | 17.12 | | 5.13 | | 65.52 | | 17.16 | | 207.20 | | 68.65 | | 341.95 | | 68.42 | | | 786.55 | | 135.14 | | 1845.40 | | 0.000040 | | 241.29 | | 0.47 |
| 14LH05-4.1\_89 | DE | 1.14 | 169.57 | | 0.76 | | 8.96 | | 13.44 | | 5.36 | | 60.04 | | 18.26 | | 215.40 | | 70.82 | | 342.01 | | 73.41 | | | 841.10 | | 136.67 | | 1956.93 | | 0.000969 | | 44.62 | | 0.58 |
| 14LH05-4.1\_06 | ME | 0.00 | 46.21 | | 0.08 | | 1.61 | | 3.69 | | 1.32 | | 13.71 | | 3.76 | | 42.12 | | 14.47 | | 69.24 | | 14.43 | | | 154.76 | | 28.02 | | 393.41 | | 0.000019 | | 635.28 | | 0.57 |
| 14LH05-4.1\_117 | ME | 0.37 | 182.28 | | 0.26 | | 6.24 | | 9.30 | | 4.95 | | 55.37 | | 12.78 | | 156.58 | | 55.36 | | 289.38 | | 62.32 | | | 788.51 | | 152.97 | | 1776.66 | | 0.000333 | | 145.58 | | 0.67 |
| 14LH05-4.1\_34 | ME | 0.24 | 45.50 | | 0.11 | | 3.17 | | 7.10 | | 2.57 | | 36.05 | | 10.56 | | 123.33 | | 42.17 | | 197.77 | | 40.71 | | | 425.78 | | 81.72 | | 1016.80 | | 0.000399 | | 68.07 | | 0.49 |
| 14LH05-4.1\_42 | ME | 0.00 | 5.55 | | 0.04 | | 0.78 | | 2.90 | | 0.24 | | 17.47 | | 5.45 | | 61.06 | | 20.58 | | 91.27 | | 18.70 | | | 188.03 | | 34.09 | | 446.17 | | 0.000012 | | 119.02 | | 0.11 |
| 14LH05-4.1\_43 | ME | 0.00 | 4.00 | | 0.05 | | 1.12 | | 1.55 | | 0.15 | | 8.14 | | 2.61 | | 31.26 | | 10.09 | | 47.95 | | 9.81 | | | 100.26 | | 18.82 | | 235.81 | | 0.000000 | | #DIV/0! | | 0.13 |
| 14LH05-4.1\_60 | ME | 0.02 | 44.05 | | 0.07 | | 1.29 | | 2.03 | | 0.89 | | 9.92 | | 2.72 | | 30.77 | | 10.68 | | 53.45 | | 12.23 | | | 129.58 | | 26.48 | | 324.17 | | 0.000118 | | 289.16 | | 0.61 |
| 14LH05-4.1\_65 | ME | 0.03 | 49.41 | | 0.03 | | 1.49 | | 2.51 | | 1.17 | | 13.48 | | 4.19 | | 51.12 | | 18.49 | | 96.51 | | 21.01 | | | 227.59 | | 44.82 | | 531.86 | | 0.000105 | | 355.55 | | 0.61 |
| 14LH05-4.1\_66 | ME | 5.10 | 167.83 | | 1.62 | | 10.54 | | 9.21 | | 4.63 | | 44.11 | | 12.64 | | 161.20 | | 53.43 | | 257.55 | | 56.86 | | | 668.09 | | 108.46 | | 1561.27 | | 0.005477 | | 14.32 | | 0.70 |
| 14LH05-4.1\_69 | ME | 0.11 | 69.61 | | 0.19 | | 3.08 | | 5.88 | | 1.66 | | 30.88 | | 8.83 | | 109.21 | | 38.96 | | 189.54 | | 39.90 | | | 460.67 | | 80.78 | | 1039.30 | | 0.000164 | | 120.32 | | 0.38 |
| 14LH05-4.1\_85 | ME | 0.11 | 19.10 | | 0.55 | | 5.12 | | 17.42 | | 0.96 | | 83.14 | | 28.90 | | 337.66 | | 117.07 | | 546.64 | | 111.72 | | | 1236.78 | | 202.83 | | 2707.99 | | 0.000063 | | 19.19 | | 0.08 |
| 14LH05-4.1\_95 | ME | 18.78 | 189.49 | | 5.16 | | 29.77 | | 13.55 | | 4.85 | | 49.08 | | 14.16 | | 152.33 | | 51.99 | | 249.51 | | 50.71 | | | 592.91 | | 102.72 | | 1525.01 | | 0.022717 | | 4.72 | | 0.57 |
| 14LH05-4.1\_99 | ME | 0.04 | 159.12 | | 0.22 | | 4.60 | | 10.70 | | 3.83 | | 47.30 | | 13.03 | | 157.19 | | 55.68 | | 269.69 | | 57.28 | | | 660.61 | | 109.78 | | 1549.07 | | 0.000043 | | 418.41 | | 0.52 |
| 14LH05-4.1\_03 | ME | 0.01 | 7.73 | | 0.08 | | 1.33 | | 2.10 | | 0.31 | | 9.22 | | 2.42 | | 24.64 | | 7.56 | | 32.09 | | 6.24 | | | 61.65 | | 10.96 | | 166.33 | | 0.000173 | | 56.44 | | 0.21 |
| 14LH05-4.1\_05 | ME | 0.08 | 42.08 | | 0.18 | | 3.07 | | 6.44 | | 2.53 | | 24.82 | | 6.56 | | 65.61 | | 22.46 | | 97.15 | | 19.79 | | | 203.45 | | 37.56 | | 531.81 | | 0.000290 | | 83.96 | | 0.61 |
| 样品点 | 类型 | La | Ce | | Pr | | Nd | | Sm | | Eu | | Gd | | Tb | | Dy | | Ho | | Er | | Tm | | | Yb | | Lu | | ∑REE | | (La/Yb)N | | Ce/Ce\* | | Eu/Eu\* |
| 14LH05-4.1\_08 | ME | 0.03 | 23.47 | | 0.03 | | 0.67 | | 3.21 | | 1.41 | | 14.51 | | 4.32 | | 47.27 | | 17.97 | | 89.12 | | 19.62 | | | 216.90 | | 42.50 | | 481.02 | | 0.000107 | | 171.58 | | 0.63 |
| 14LH05-4.1\_09 | ME | 0.01 | 4.59 | | 0.08 | | 0.93 | | 2.18 | | 0.12 | | 12.25 | | 3.82 | | 44.28 | | 15.96 | | 67.25 | | 13.58 | | | 138.12 | | 23.98 | | 327.13 | | 0.000076 | | 33.23 | | 0.07 |
| 14LH05-4.1\_100 | ME | 0.02 | 41.56 | | 0.20 | | 3.71 | | 8.37 | | 1.34 | | 34.45 | | 8.84 | | 103.79 | | 31.34 | | 144.89 | | 30.35 | | | 341.77 | | 55.66 | | 806.28 | | 0.000044 | | 158.39 | | 0.24 |
| 14LH05-4.1\_103 | ME | 0.14 | 115.49 | | 0.22 | | 4.58 | | 8.07 | | 3.14 | | 45.59 | | 12.71 | | 153.74 | | 55.05 | | 266.54 | | 54.84 | | | 648.83 | | 115.40 | | 1484.34 | | 0.000156 | | 161.99 | | 0.50 |
| 14LH05-4.1\_104 | ME | 0.16 | 10.25 | | 0.08 | | 0.86 | | 4.41 | | 0.46 | | 19.86 | | 6.69 | | 86.17 | | 29.17 | | 121.65 | | 25.90 | | | 276.93 | | 45.35 | | 627.94 | | 0.000420 | | 22.66 | | 0.15 |
| 14LH05-4.1\_105 | ME | 0.21 | 119.91 | | 0.57 | | 11.92 | | 17.90 | | 6.27 | | 66.92 | | 16.98 | | 182.73 | | 57.99 | | 266.61 | | 56.59 | | | 614.21 | | 108.39 | | 1527.18 | | 0.000242 | | 85.50 | | 0.55 |
| 14LH05-4.1\_106 | ME | 0.08 | 27.39 | | 0.24 | | 2.60 | | 3.00 | | 0.86 | | 10.03 | | 2.30 | | 27.25 | | 7.80 | | 34.72 | | 7.57 | | | 80.99 | | 13.89 | | 218.69 | | 0.000670 | | 50.28 | | 0.48 |
| 14LH05-4.1\_108 | ME | 0.00 | 12.50 | | 0.14 | | 1.52 | | 4.80 | | 0.26 | | 24.93 | | 7.89 | | 91.47 | | 31.81 | | 144.00 | | 29.23 | | | 309.92 | | 51.24 | | 709.72 | | 0.000000 | | #DIV/0! | | 0.07 |
| 14LH05-4.1\_11 | ME | 0.00 | 10.03 | | 0.07 | | 1.04 | | 1.78 | | 0.28 | | 5.83 | | 1.66 | | 18.49 | | 6.06 | | 26.27 | | 5.34 | | | 53.49 | | 9.45 | | 139.76 | | 0.000000 | | #DIV/0! | | 0.27 |
| 14LH05-4.1\_111 | ME | 0.16 | 29.33 | | 0.28 | | 2.31 | | 4.46 | | 0.85 | | 20.18 | | 4.93 | | 56.61 | | 19.25 | | 93.02 | | 19.86 | | | 226.37 | | 37.90 | | 515.53 | | 0.000505 | | 33.75 | | 0.28 |
| 14LH05-4.1\_112 | ME | 0.02 | 89.00 | | 0.01 | | 1.23 | | 6.73 | | 1.79 | | 24.35 | | 8.34 | | 119.09 | | 45.47 | | 244.18 | | 56.92 | | | 687.00 | | 133.48 | | 1417.61 | | 0.000020 | | 1586.23 | | 0.43 |
| 14LH05-4.1\_113 | ME | 0.06 | 11.99 | | 0.10 | | 1.07 | | 4.75 | | 0.45 | | 23.49 | | 7.88 | | 105.60 | | 37.13 | | 192.03 | | 41.60 | | | 476.60 | | 83.31 | | 986.06 | | 0.000094 | | 37.04 | | 0.13 |
| 14LH05-4.1\_114 | ME | 0.00 | 23.56 | | 0.16 | | 1.70 | | 2.23 | | 0.92 | | 8.80 | | 1.92 | | 21.22 | | 6.89 | | 31.21 | | 6.77 | | | 78.48 | | 13.57 | | 197.43 | | 0.000000 | | #DIV/0! | | 0.64 |
| 14LH05-4.1\_115 | ME | 0.02 | 16.93 | | 0.19 | | 4.19 | | 10.01 | | 0.58 | | 46.83 | | 16.09 | | 181.99 | | 61.99 | | 269.88 | | 53.09 | | | 560.09 | | 92.15 | | 1314.00 | | 0.000021 | | 74.58 | | 0.08 |
| 14LH05-4.1\_122 | ME | 0.06 | 28.16 | | 0.18 | | 2.92 | | 6.23 | | 0.69 | | 22.39 | | 6.55 | | 67.62 | | 20.67 | | 90.13 | | 18.20 | | | 183.82 | | 29.25 | | 476.87 | | 0.000236 | | 66.33 | | 0.18 |
| 14LH05-4.1\_17 | ME | 0.01 | 10.45 | | 0.05 | | 0.77 | | 1.51 | | 0.22 | | 5.54 | | 1.69 | | 17.54 | | 5.88 | | 25.51 | | 5.22 | | | 57.92 | | 9.88 | | 142.19 | | 0.000093 | | 136.80 | | 0.24 |
| 14LH05-4.1\_18 | ME | 0.07 | 4.86 | | 0.01 | | 0.47 | | 1.64 | | 0.19 | | 9.35 | | 2.94 | | 35.23 | | 12.81 | | 63.00 | | 13.73 | | | 149.03 | | 26.86 | | 320.18 | | 0.000347 | | 41.16 | | 0.14 |
| 14LH05-4.1\_19 | ME | 0.02 | 4.61 | | 0.04 | | 0.87 | | 2.55 | | 0.26 | | 13.70 | | 4.36 | | 49.69 | | 16.90 | | 78.20 | | 17.60 | | | 182.20 | | 30.99 | | 402.00 | | 0.000089 | | 38.66 | | 0.13 |
| 14LH05-4.1\_20 | ME | 0.04 | 24.40 | | 0.09 | | 1.98 | | 2.59 | | 1.02 | | 12.27 | | 3.46 | | 40.77 | | 13.87 | | 65.02 | | 13.54 | | | 149.51 | | 27.12 | | 355.69 | | 0.000182 | | 100.85 | | 0.56 |
| 14LH05-4.1\_21 | ME | 0.30 | 3.87 | | 0.13 | | 0.82 | | 1.94 | | 0.12 | | 9.41 | | 2.94 | | 37.26 | | 13.32 | | 60.43 | | 12.91 | | | 133.49 | | 24.59 | | 301.53 | | 0.001607 | | 4.84 | | 0.08 |
| 14LH05-4.1\_22 | ME | 22.35 | 119.55 | | 18.07 | | 95.60 | | 25.33 | | 2.77 | | 40.10 | | 7.57 | | 66.05 | | 19.26 | | 73.36 | | 14.11 | | | 145.84 | | 21.63 | | 671.60 | | 0.109905 | | 1.46 | | 0.27 |
| 14LH05-4.1\_26 | ME | 0.01 | 4.71 | | 0.04 | | 0.67 | | 1.84 | | 0.09 | | 10.22 | | 3.06 | | 35.00 | | 11.85 | | 53.78 | | 11.16 | | | 119.71 | | 19.78 | | 271.93 | | 0.000044 | | 66.93 | | 0.06 |
| 14LH05-4.1\_31 | ME | 0.04 | 7.42 | | 0.04 | | 0.93 | | 1.31 | | 0.18 | | 7.23 | | 2.25 | | 25.29 | | 8.59 | | 41.42 | | 8.84 | | | 94.77 | | 17.11 | | 215.43 | | 0.000277 | | 45.81 | | 0.18 |
| 14LH05-4.1\_32 | ME | 0.00 | 3.88 | | 0.05 | | 0.69 | | 0.94 | | 0.09 | | 6.70 | | 2.20 | | 26.95 | | 9.12 | | 43.43 | | 9.40 | | | 98.88 | | 17.54 | | 219.88 | | 0.000000 | | #DIV/0! | | 0.12 |
| 样品点 | 类型 | La | Ce | | Pr | | Nd | | Sm | | Eu | | Gd | | Tb | | Dy | | Ho | | Er | | Tm | | | Yb | | Lu | | ∑REE | | (La/Yb)N | | Ce/Ce\* | | Eu/Eu\* |
| 14LH05-4.1\_33 | ME | 0.00 | 5.06 | | 0.09 | | 0.83 | | 2.47 | | 0.29 | | 14.80 | | 4.35 | | 47.11 | | 15.83 | | 67.30 | | 13.82 | | | 138.75 | | 24.32 | | 335.03 | | 0.000026 | | 59.09 | | 0.15 |
| 14LH05-4.1\_35 | ME | 0.01 | 11.49 | | 0.10 | | 1.13 | | 1.70 | | 0.27 | | 8.71 | | 2.19 | | 23.76 | | 7.44 | | 31.44 | | 5.76 | | | 57.81 | | 10.07 | | 161.88 | | 0.000125 | | 88.89 | | 0.21 |
| 14LH05-4.1\_37 | ME | 0.01 | 8.24 | | 0.06 | | 0.77 | | 0.88 | | 0.35 | | 3.02 | | 0.79 | | 7.56 | | 2.31 | | 10.82 | | 2.56 | | | 25.46 | | 5.07 | | 67.88 | | 0.000322 | | 80.52 | | 0.65 |
| 14LH05-4.1\_49 | ME | 0.03 | 36.94 | | 0.10 | | 1.44 | | 4.04 | | 1.41 | | 18.62 | | 5.58 | | 62.54 | | 20.04 | | 93.82 | | 19.17 | | | 204.86 | | 37.87 | | 506.46 | | 0.000120 | | 152.15 | | 0.50 |
| 14LH05-4.1\_61 | ME | 0.11 | 11.98 | | 0.11 | | 1.40 | | 2.01 | | 0.50 | | 5.08 | | 1.47 | | 15.69 | | 5.59 | | 28.91 | | 6.16 | | | 66.06 | | 11.35 | | 156.41 | | 0.001158 | | 26.86 | | 0.48 |
| 14LH05-4.1\_62 | ME | 0.05 | 52.45 | | 0.05 | | 1.22 | | 2.66 | | 1.25 | | 13.55 | | 3.79 | | 41.44 | | 14.36 | | 72.61 | | 16.03 | | | 181.02 | | 38.40 | | 438.88 | | 0.000201 | | 259.41 | | 0.64 |
| 14LH05-4.1\_64 | ME | 8.90 | 64.05 | | 1.94 | | 10.61 | | 4.77 | | 1.98 | | 20.93 | | 5.61 | | 62.67 | | 21.35 | | 100.39 | | 21.06 | | | 225.75 | | 40.71 | | 590.72 | | 0.028282 | | 3.78 | | 0.60 |
| 14LH05-4.1\_68 | ME | 0.01 | 20.11 | | 0.13 | | 2.84 | | 4.65 | | 0.35 | | 21.27 | | 5.89 | | 61.92 | | 17.84 | | 75.36 | | 13.88 | | | 147.33 | | 22.90 | | 394.48 | | 0.000073 | | 113.98 | | 0.11 |
| 14LH05-4.1\_74 | ME | 0.02 | 14.71 | | 0.18 | | 2.83 | | 6.71 | | 0.53 | | 25.16 | | 6.34 | | 53.64 | | 11.23 | | 35.33 | | 5.66 | | | 47.92 | | 6.07 | | 216.32 | | 0.000276 | | 62.56 | | 0.13 |
| 14LH05-4.1\_76 | ME | 0.03 | 33.66 | | 0.25 | | 3.28 | | 5.17 | | 0.68 | | 22.86 | | 6.10 | | 65.32 | | 19.82 | | 89.20 | | 17.58 | | | 187.44 | | 28.41 | | 479.79 | | 0.000132 | | 89.08 | | 0.19 |
| 14LH05-4.1\_83 | ME | 0.03 | 23.90 | | 0.09 | | 2.19 | | 1.85 | | 1.59 | | 9.17 | | 2.44 | | 26.70 | | 7.57 | | 34.61 | | 6.73 | | | 81.82 | | 14.55 | | 213.23 | | 0.000268 | | 109.68 | | 1.18 |
| 14LH05-4.1\_90 | ME | 142.47 | 300.77 | | 32.59 | | 144.29 | | 36.69 | | 4.15 | | 93.40 | | 21.43 | | 212.74 | | 59.84 | | 259.91 | | 49.52 | | | 528.93 | | 81.80 | | 1968.54 | | 0.193216 | | 1.08 | | 0.22 |
| 14LH05-4.1\_92 | ME | 0.80 | 120.61 | | 0.48 | | 4.97 | | 7.62 | | 2.90 | | 38.51 | | 11.45 | | 144.28 | | 50.56 | | 256.71 | | 56.29 | | | 670.98 | | 107.53 | | 1473.70 | | 0.000859 | | 47.52 | | 0.52 |
| 14LH05-4.1\_93 | ME | 0.35 | 149.03 | | 0.34 | | 5.11 | | 9.69 | | 4.62 | | 51.85 | | 14.49 | | 187.47 | | 65.20 | | 338.90 | | 75.92 | | | 940.06 | | 168.02 | | 2011.05 | | 0.000269 | | 106.31 | | 0.63 |
| 14LH05-4.1\_94 | ME | 0.00 | 35.03 | | 0.23 | | 2.90 | | 6.56 | | 0.69 | | 29.50 | | 7.20 | | 81.80 | | 27.90 | | 125.34 | | 25.54 | | | 274.91 | | 42.35 | | 659.95 | | 0.000000 | | #DIV/0! | | 0.15 |
| 14LH05-4.1\_96 | ME | 0.01 | 141.31 | | 0.26 | | 5.98 | | 9.47 | | 4.67 | | 53.96 | | 14.66 | | 169.57 | | 60.15 | | 282.40 | | 62.21 | | | 711.05 | | 116.34 | | 1632.04 | | 0.000011 | | 643.90 | | 0.63 |
| 14LH05-4.1\_97 | ME | 0.14 | 100.79 | | 0.52 | | 9.92 | | 15.67 | | 6.29 | | 69.11 | | 17.25 | | 184.91 | | 55.88 | | 258.25 | | 51.11 | | | 572.73 | | 94.25 | | 1436.81 | | 0.000176 | | 91.88 | | 0.58 |
| 14LH05-4.1\_98 | ME | 0.09 | 12.27 | | 0.18 | | 2.04 | | 8.82 | | 0.83 | | 37.15 | | 13.32 | | 152.95 | | 56.07 | | 250.15 | | 54.05 | | | 560.90 | | 96.85 | | 1245.66 | | 0.000109 | | 24.38 | | 0.14 |
|  |  |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |  | |  | |  | | |  |

附表2 东阿拉善地块叠布斯格杂岩中黑云斜长片麻岩锆石LA-ICP-MS U–Pb定年结果

Apppendix table 2 LA-ICP-MS analyses of zircons from the Diebusige biotite-plagioclase gneiss

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 样品点 | 类型 | 同位素比值（10-6） | | | | Th/U | 同位素比值 | | | | | | 同位素年龄（Ma） | | | | | | 谐和度 |
| TotalPb | CommonPb | 232Th | 238U | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* |
| 14LH05-4.1\_01 | DE | 384.48 | 8.53 | 167.97 | 255.32 | 0.66 | 0.1275 | 0.0026 | 6.5401 | 0.1426 | 0.3708 | 0.0042 | 2065 | 35 | 2051 | 19 | 2033 | 20 | 99% |
| 14LH05-4.1\_04 | DE | 638.67 | 2.72 | 280.77 | 386.79 | 0.73 | 0.1255 | 0.0028 | 6.3948 | 0.1435 | 0.3679 | 0.0036 | 2036 | 40 | 2032 | 20 | 2019 | 17 | 99% |
| 14LH05-4.1\_10 | DE | 676.85 | 0.00 | 293.63 | 368.10 | 0.80 | 0.1314 | 0.0029 | 7.0194 | 0.1594 | 0.3851 | 0.0039 | 2116 | 39 | 2114 | 20 | 2100 | 18 | 99% |
| 14LH05-4.1\_101 | DE | 1305.83 | 0.00 | 1075.37 | 1015.66 | 1.06 | 0.1240 | 0.0033 | 6.3081 | 0.1658 | 0.3668 | 0.0037 | 2017 | 46 | 2020 | 23 | 2014 | 17 | 99% |
| 14LH05-4.1\_110 | DE | 722.14 | 163.68 | 526.98 | 658.25 | 0.80 | 0.1281 | 0.0027 | 6.7251 | 0.1442 | 0.3793 | 0.0032 | 2072 | 37 | 2076 | 19 | 2073 | 15 | 99% |
| 14LH05-4.1\_116 | DE | 688.47 | 162.82 | 553.33 | 650.51 | 0.85 | 0.1246 | 0.0028 | 6.5038 | 0.1781 | 0.3753 | 0.0051 | 2033 | 40 | 2046 | 24 | 2054 | 24 | 99% |
| 14LH05-4.1\_118 | DE | 1586.36 | 1.09 | 1360.90 | 1094.09 | 1.24 | 0.1244 | 0.0024 | 6.2897 | 0.1230 | 0.3649 | 0.0027 | 2021 | 34 | 2017 | 17 | 2005 | 13 | 99% |
| 14LH05-4.1\_120 | DE | 966.08 | 70.45 | 766.46 | 654.21 | 1.17 | 0.1293 | 0.0034 | 6.8735 | 0.1818 | 0.3839 | 0.0039 | 2100 | 46 | 2095 | 23 | 2094 | 18 | 99% |
| 14LH05-4.1\_13 | DE | 531.61 | 10.06 | 240.50 | 274.65 | 0.88 | 0.1284 | 0.0039 | 6.6789 | 0.2169 | 0.3743 | 0.0051 | 2076 | 54 | 2070 | 29 | 2049 | 24 | 99% |
| 14LH05-4.1\_14 | DE | 881.32 | 6.69 | 407.26 | 376.04 | 1.08 | 0.1274 | 0.0034 | 6.6640 | 0.1780 | 0.3768 | 0.0045 | 2062 | 46 | 2068 | 24 | 2061 | 21 | 99% |
| 14LH05-4.1\_15 | DE | 619.49 | 0.00 | 288.01 | 329.13 | 0.88 | 0.1251 | 0.0030 | 6.4395 | 0.1475 | 0.3706 | 0.0034 | 2031 | 42 | 2038 | 20 | 2032 | 16 | 99% |
| 14LH05-4.1\_16 | DE | 771.97 | 0.00 | 354.64 | 407.15 | 0.87 | 0.1260 | 0.0028 | 6.5255 | 0.1416 | 0.3724 | 0.0034 | 2042 | 39 | 2049 | 19 | 2041 | 16 | 99% |
| 14LH05-4.1\_23 | DE | 794.05 | 1.80 | 304.51 | 685.72 | 0.44 | 0.1246 | 0.0026 | 6.4367 | 0.1377 | 0.3716 | 0.0036 | 2033 | 38 | 2037 | 19 | 2037 | 17 | 99% |
| 14LH05-4.1\_24 | DE | 564.82 | 4.18 | 249.89 | 325.55 | 0.77 | 0.1246 | 0.0031 | 6.4747 | 0.1669 | 0.3738 | 0.0040 | 2033 | 44 | 2042 | 23 | 2047 | 19 | 99% |
| 14LH05-4.1\_30 | DE | 885.40 | 0.00 | 445.77 | 382.48 | 1.17 | 0.1246 | 0.0024 | 6.4008 | 0.1269 | 0.3694 | 0.0033 | 2033 | 34 | 2032 | 17 | 2026 | 16 | 99% |
| 14LH05-4.1\_44 | DE | 541.92 | 0.00 | 247.34 | 294.83 | 0.84 | 0.1271 | 0.0028 | 6.6083 | 0.1461 | 0.3758 | 0.0035 | 2058 | 39 | 2060 | 20 | 2057 | 16 | 99% |
| 14LH05-4.1\_47 | DE | 396.91 | 0.00 | 185.40 | 193.89 | 0.96 | 0.1252 | 0.0029 | 6.4429 | 0.1481 | 0.3707 | 0.0037 | 2032 | 41 | 2038 | 20 | 2033 | 17 | 99% |
| 14LH05-4.1\_48 | DE | 582.71 | 1.59 | 274.70 | 284.35 | 0.97 | 0.1275 | 0.0031 | 6.6048 | 0.1581 | 0.3731 | 0.0036 | 2065 | 43 | 2060 | 21 | 2044 | 17 | 99% |
| 14LH05-4.1\_50 | DE | 466.00 | 15.36 | 210.60 | 242.37 | 0.87 | 0.1255 | 0.0027 | 6.4511 | 0.1421 | 0.3709 | 0.0038 | 2036 | 39 | 2039 | 19 | 2033 | 18 | 99% |
| 14LH05-4.1\_55 | DE | 484.98 | 0.00 | 225.50 | 295.38 | 0.76 | 0.1230 | 0.0031 | 6.3564 | 0.1612 | 0.3733 | 0.0042 | 2067 | 50 | 2026 | 22 | 2045 | 20 | 99% |
| 样品点 | 类型 | 同位素比值（10-6） | | | | Th/U | 同位素比值 | | | | | | 同位素年龄（Ma） | | | | | | 谐和度 |
| TotalPb | CommonPb | 232Th | 238U | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* |
| 14LH05-4.1\_57 | DE | 630.00 | 9.09 | 305.35 | 332.24 | 0.92 | 0.1245 | 0.0024 | 6.3949 | 0.1262 | 0.3711 | 0.0039 | 2033 | 35 | 2032 | 17 | 2035 | 19 | 99% |
| 14LH05-4.1\_72 | DE | 1573.79 | 0.00 | 1160.69 | 1202.12 | 0.97 | 0.1269 | 0.0027 | 6.5939 | 0.1486 | 0.3751 | 0.0045 | 2055 | 39 | 2059 | 20 | 2053 | 21 | 99% |
| 14LH05-4.1\_75 | DE | 1669.31 | 0.00 | 1217.87 | 1170.88 | 1.04 | 0.1307 | 0.0027 | 7.0030 | 0.1476 | 0.3866 | 0.0043 | 2109 | 36 | 2112 | 19 | 2107 | 20 | 99% |
| 14LH05-4.1\_77 | DE | 1577.65 | 63.55 | 1138.35 | 1683.67 | 0.68 | 0.1237 | 0.0032 | 6.2099 | 0.1563 | 0.3619 | 0.0039 | 2010 | 45 | 2006 | 22 | 1991 | 19 | 99% |
| 14LH05-4.1\_78 | DE | 1296.40 | 12.10 | 977.15 | 837.59 | 1.17 | 0.1262 | 0.0029 | 6.5702 | 0.1530 | 0.3746 | 0.0038 | 2056 | 41 | 2055 | 21 | 2051 | 18 | 99% |
| 14LH05-4.1\_79 | DE | 969.79 | 0.00 | 634.33 | 1017.44 | 0.62 | 0.1257 | 0.0029 | 6.4927 | 0.1463 | 0.3719 | 0.0037 | 2039 | 42 | 2045 | 20 | 2038 | 17 | 99% |
| 14LH05-4.1\_80 | DE | 1573.07 | 86.17 | 891.76 | 2529.59 | 0.35 | 0.1230 | 0.0025 | 6.2521 | 0.1378 | 0.3655 | 0.0051 | 2067 | 35 | 2012 | 19 | 2008 | 24 | 99% |
| 14LH05-4.1\_81 | DE | 1401.88 | 0.00 | 1003.18 | 1106.40 | 0.91 | 0.1319 | 0.0031 | 7.1128 | 0.1652 | 0.3871 | 0.0041 | 2124 | 41 | 2126 | 21 | 2109 | 19 | 99% |
| 14LH05-4.1\_82 | DE | 1182.53 | 71.50 | 901.51 | 909.57 | 0.99 | 0.1275 | 0.0029 | 6.6791 | 0.1518 | 0.3760 | 0.0039 | 2065 | 36 | 2070 | 20 | 2057 | 18 | 99% |
| 14LH05-4.1\_84 | DE | 1525.26 | 0.00 | 1155.29 | 1018.78 | 1.13 | 0.1360 | 0.0035 | 7.5508 | 0.1856 | 0.3985 | 0.0044 | 2177 | 45 | 2179 | 22 | 2162 | 20 | 99% |
| 14LH05-4.1\_88 | DE | 1253.36 | 0.00 | 922.47 | 993.64 | 0.93 | 0.1256 | 0.0029 | 6.5380 | 0.1571 | 0.3757 | 0.0035 | 2037 | 41 | 2051 | 21 | 2056 | 17 | 99% |
| 14LH05-4.1\_89 | DE | 1663.77 | 39.38 | 1306.17 | 1483.49 | 0.88 | 0.1291 | 0.0031 | 6.8607 | 0.1979 | 0.3835 | 0.0060 | 2087 | 43 | 2094 | 26 | 2093 | 28 | 99% |
| 14LH05-4.1\_06 | ME | 677.60 | 0.00 | 324.46 | 364.06 | 0.89 | 0.1198 | 0.0029 | 5.8658 | 0.1449 | 0.3534 | 0.0039 | 1954 | 44 | 1956 | 21 | 1951 | 19 | 99% |
| 14LH05-4.1\_117 | ME | 3134.22 | 0.00 | 2381.14 | 3227.71 | 0.74 | 0.1201 | 0.0022 | 5.9011 | 0.1087 | 0.3546 | 0.0026 | 1958 | 33 | 1961 | 16 | 1956 | 12 | 99% |
| 14LH05-4.1\_34 | ME | 772.21 | 0.00 | 357.42 | 543.54 | 0.66 | 0.1205 | 0.0023 | 5.8975 | 0.1118 | 0.3519 | 0.0029 | 1965 | 33 | 1961 | 17 | 1944 | 14 | 99% |
| 14LH05-4.1\_42 | ME | 364.42 | 0.04 | 100.05 | 592.17 | 0.17 | 0.1188 | 0.0026 | 5.7580 | 0.1333 | 0.3502 | 0.0037 | 1939 | 39 | 1940 | 20 | 1935 | 18 | 99% |
| 14LH05-4.1\_43 | ME | 185.97 | 7.99 | 51.15 | 282.11 | 0.18 | 0.1197 | 0.0030 | 5.8418 | 0.1501 | 0.3525 | 0.0035 | 1952 | 45 | 1953 | 22 | 1947 | 17 | 99% |
| 14LH05-4.1\_60 | ME | 573.62 | 0.00 | 292.33 | 353.00 | 0.83 | 0.1188 | 0.0021 | 5.7699 | 0.1026 | 0.3505 | 0.0029 | 1939 | 31 | 1942 | 15 | 1937 | 14 | 99% |
| 14LH05-4.1\_65 | ME | 854.32 | 0.00 | 425.86 | 581.77 | 0.73 | 0.1198 | 0.0019 | 5.8395 | 0.0904 | 0.3515 | 0.0026 | 1953 | 29 | 1952 | 13 | 1942 | 12 | 99% |
| 14LH05-4.1\_66 | ME | 1521.37 | 0.00 | 1198.81 | 1306.24 | 0.92 | 0.1207 | 0.0024 | 5.9130 | 0.1211 | 0.3533 | 0.0039 | 1966 | 68 | 1963 | 18 | 1950 | 19 | 99% |
| 14LH05-4.1\_69 | ME | 966.24 | 33.43 | 630.31 | 1320.30 | 0.48 | 0.1192 | 0.0027 | 5.8090 | 0.1342 | 0.3511 | 0.0037 | 1946 | 42 | 1948 | 20 | 1940 | 18 | 99% |
| 14LH05-4.1\_85 | ME | 1211.96 | 98.20 | 533.12 | 2451.17 | 0.22 | 0.1201 | 0.0027 | 5.9040 | 0.1284 | 0.3534 | 0.0035 | 1957 | 41 | 1962 | 19 | 1951 | 17 | 99% |
| 14LH05-4.1\_95 | ME | 1173.85 | 75.47 | 983.84 | 952.52 | 1.03 | 0.1209 | 0.0029 | 5.9541 | 0.1510 | 0.3559 | 0.0039 | 1969 | 44 | 1969 | 22 | 1963 | 19 | 99% |
| 样品点 | 类型 | 同位素比值（10-6） | | | | Th/U | 同位素比值 | | | | | | 同位素年龄（Ma） | | | | | | 谐和度 |
| TotalPb | CommonPb | 232Th | 238U | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* |
| 14LH05-4.1\_99 | ME | 1509.95 | 0.00 | 1243.96 | 1340.29 | 0.93 | 0.1202 | 0.0024 | 5.9087 | 0.1182 | 0.3547 | 0.0029 | 1961 | 36 | 1963 | 17 | 1957 | 14 | 99% |
| 14LH05-4.1\_03 | ME | 264.84 | 4.91 | 107.83 | 300.49 | 0.36 | 0.1127 | 0.0024 | 5.1590 | 0.1180 | 0.3303 | 0.0037 | 1843 | 37 | 1846 | 19 | 1840 | 18 | 99% |
| 14LH05-4.1\_05 | ME | 579.42 | 2.01 | 288.22 | 300.13 | 0.96 | 0.1171 | 0.0028 | 5.6021 | 0.1377 | 0.3452 | 0.0038 | 1913 | 49 | 1916 | 21 | 1912 | 18 | 99% |
| 14LH05-4.1\_08 | ME | 445.40 | 0.00 | 185.42 | 459.76 | 0.40 | 0.1145 | 0.0026 | 5.3337 | 0.1283 | 0.3355 | 0.0034 | 1872 | 41 | 1874 | 21 | 1865 | 17 | 99% |
| 14LH05-4.1\_09 | ME | 241.47 | 9.25 | 85.98 | 328.41 | 0.26 | 0.1120 | 0.0025 | 5.0990 | 0.1185 | 0.3289 | 0.0040 | 1832 | 41 | 1836 | 20 | 1833 | 20 | 99% |
| 14LH05-4.1\_100 | ME | 639.62 | 0.00 | 471.68 | 848.99 | 0.56 | 0.1123 | 0.0026 | 5.1404 | 0.1246 | 0.3302 | 0.0042 | 1837 | 42 | 1843 | 21 | 1839 | 20 | 99% |
| 14LH05-4.1\_103 | ME | 1034.30 | 134.49 | 837.70 | 1059.78 | 0.79 | 0.1135 | 0.0026 | 5.2354 | 0.1189 | 0.3325 | 0.0029 | 1857 | 41 | 1858 | 19 | 1850 | 14 | 99% |
| 14LH05-4.1\_104 | ME | 369.32 | 231.92 | 171.57 | 828.59 | 0.21 | 0.1128 | 0.0032 | 5.0526 | 0.1363 | 0.3234 | 0.0036 | 1856 | 51 | 1828 | 23 | 1806 | 17 | 98% |
| 14LH05-4.1\_105 | ME | 995.57 | 96.37 | 884.50 | 732.26 | 1.21 | 0.1183 | 0.0027 | 5.7316 | 0.1315 | 0.3496 | 0.0032 | 1931 | 36 | 1936 | 20 | 1933 | 15 | 99% |
| 14LH05-4.1\_106 | ME | 739.73 | 0.00 | 614.73 | 799.98 | 0.77 | 0.1101 | 0.0026 | 5.1076 | 0.1280 | 0.3349 | 0.0039 | 1811 | 43 | 1837 | 21 | 1862 | 19 | 98% |
| 14LH05-4.1\_108 | ME | 506.43 | 49.77 | 244.10 | 1033.85 | 0.24 | 0.1147 | 0.0027 | 5.3965 | 0.1334 | 0.3397 | 0.0038 | 1876 | 42 | 1884 | 21 | 1885 | 18 | 99% |
| 14LH05-4.1\_11 | ME | 141.24 | 11.48 | 76.72 | 70.43 | 1.09 | 0.1135 | 0.0030 | 5.2498 | 0.1417 | 0.3355 | 0.0048 | 1857 | 48 | 1861 | 23 | 1865 | 23 | 99% |
| 14LH05-4.1\_111 | ME | 547.53 | 164.96 | 451.16 | 607.59 | 0.74 | 0.1101 | 0.0022 | 4.9737 | 0.1015 | 0.3263 | 0.0028 | 1811 | 36 | 1815 | 17 | 1820 | 14 | 99% |
| 14LH05-4.1\_112 | ME | 760.57 | 0.00 | 498.11 | 1105.42 | 0.45 | 0.1183 | 0.0022 | 5.5636 | 0.1086 | 0.3396 | 0.0028 | 1931 | 34 | 1910 | 17 | 1885 | 14 | 98% |
| 14LH05-4.1\_113 | ME | 1480.37 | 81.55 | 475.55 | 3599.54 | 0.13 | 0.1168 | 0.0022 | 5.5713 | 0.1084 | 0.3443 | 0.0029 | 1909 | 34 | 1912 | 17 | 1907 | 14 | 99% |
| 14LH05-4.1\_114 | ME | 566.04 | 0.00 | 481.94 | 587.12 | 0.82 | 0.1123 | 0.0023 | 5.1331 | 0.1113 | 0.3300 | 0.0031 | 1839 | 38 | 1842 | 18 | 1838 | 15 | 99% |
| 14LH05-4.1\_115 | ME | 1264.04 | 118.33 | 451.41 | 2938.63 | 0.15 | 0.1166 | 0.0021 | 5.5508 | 0.0998 | 0.3436 | 0.0025 | 1906 | 31 | 1908 | 16 | 1904 | 12 | 99% |
| 14LH05-4.1\_122 | ME | 468.72 | 23.62 | 341.17 | 680.30 | 0.50 | 0.1120 | 0.0024 | 5.1002 | 0.1162 | 0.3284 | 0.0035 | 1832 | 40 | 1836 | 19 | 1830 | 17 | 99% |
| 14LH05-4.1\_17 | ME | 298.59 | 1.46 | 146.39 | 218.16 | 0.67 | 0.1119 | 0.0026 | 5.1413 | 0.1227 | 0.3300 | 0.0039 | 1831 | 42 | 1843 | 20 | 1838 | 19 | 99% |
| 14LH05-4.1\_18 | ME | 702.85 | 0.00 | 110.53 | 1600.42 | 0.07 | 0.1128 | 0.0024 | 5.2246 | 0.1127 | 0.3325 | 0.0040 | 1856 | 39 | 1857 | 18 | 1850 | 19 | 99% |
| 14LH05-4.1\_19 | ME | 273.63 | 0.00 | 72.76 | 476.79 | 0.15 | 0.1130 | 0.0027 | 5.2418 | 0.1232 | 0.3336 | 0.0048 | 1850 | 43 | 1859 | 20 | 1856 | 23 | 99% |
| 14LH05-4.1\_20 | ME | 554.77 | 3.83 | 238.36 | 479.41 | 0.50 | 0.1164 | 0.0025 | 5.5477 | 0.1268 | 0.3416 | 0.0042 | 1902 | 39 | 1908 | 20 | 1894 | 20 | 99% |
| 14LH05-4.1\_21 | ME | 261.17 | 7.78 | 55.84 | 509.86 | 0.11 | 0.1127 | 0.0023 | 5.2034 | 0.1112 | 0.3323 | 0.0045 | 1843 | 37 | 1853 | 18 | 1849 | 22 | 99% |
| 样品点 | 类型 | 同位素比值（10-6） | | | | Th/U | 同位素比值 | | | | | | 同位素年龄（Ma） | | | | | | 谐和度 |
| TotalPb | CommonPb | 232Th | 238U | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* | 207Pb/206Pb | 1 *σ* | 207Pb/235U | 1 *σ* | 206Pb/238U | 1 *σ* |
| 14LH05-4.1\_22 | ME | 423.69 | 6.84 | 130.58 | 591.66 | 0.22 | 0.1146 | 0.0025 | 5.3850 | 0.1225 | 0.3382 | 0.0044 | 1873 | 45 | 1882 | 20 | 1878 | 21 | 99% |
| 14LH05-4.1\_26 | ME | 183.54 | 0.38 | 70.78 | 207.55 | 0.34 | 0.1150 | 0.0024 | 5.3911 | 0.1214 | 0.3383 | 0.0045 | 1880 | 37 | 1883 | 19 | 1878 | 22 | 99% |
| 14LH05-4.1\_31 | ME | 205.50 | 3.70 | 57.19 | 285.53 | 0.20 | 0.1161 | 0.0023 | 5.3791 | 0.1179 | 0.3326 | 0.0035 | 1898 | 36 | 1882 | 19 | 1851 | 17 | 98% |
| 14LH05-4.1\_32 | ME | 232.30 | 0.00 | 62.89 | 364.78 | 0.17 | 0.1163 | 0.0020 | 5.5074 | 0.0990 | 0.3409 | 0.0033 | 1900 | 32 | 1902 | 15 | 1891 | 16 | 99% |
| 14LH05-4.1\_33 | ME | 256.47 | 0.00 | 91.92 | 293.17 | 0.31 | 0.1168 | 0.0021 | 5.5971 | 0.1010 | 0.3448 | 0.0029 | 1909 | 33 | 1916 | 16 | 1910 | 14 | 99% |
| 14LH05-4.1\_35 | ME | 234.66 | 8.04 | 113.00 | 173.70 | 0.65 | 0.1113 | 0.0026 | 5.0463 | 0.1158 | 0.3269 | 0.0034 | 1820 | 43 | 1827 | 19 | 1823 | 16 | 99% |
| 14LH05-4.1\_37 | ME | 212.40 | 1.70 | 102.39 | 147.27 | 0.70 | 0.1149 | 0.0029 | 5.3638 | 0.1398 | 0.3358 | 0.0038 | 1877 | 45 | 1879 | 22 | 1867 | 18 | 99% |
| 14LH05-4.1\_49 | ME | 615.63 | 2.15 | 298.30 | 537.25 | 0.56 | 0.1135 | 0.0026 | 5.2525 | 0.1278 | 0.3332 | 0.0042 | 1857 | 42 | 1861 | 21 | 1854 | 20 | 99% |
| 14LH05-4.1\_61 | ME | 379.69 | 0.00 | 168.96 | 370.51 | 0.46 | 0.1109 | 0.0020 | 4.9950 | 0.0981 | 0.3248 | 0.0032 | 1814 | 34 | 1818 | 17 | 1813 | 16 | 99% |
| 14LH05-4.1\_62 | ME | 1146.59 | 7.29 | 531.79 | 998.68 | 0.53 | 0.1171 | 0.0018 | 5.6126 | 0.0997 | 0.3451 | 0.0035 | 1913 | 29 | 1918 | 15 | 1911 | 17 | 99% |
| 14LH05-4.1\_64 | ME | 479.47 | 0.00 | 252.54 | 314.61 | 0.80 | 0.1146 | 0.0018 | 5.3551 | 0.0991 | 0.3369 | 0.0039 | 1874 | 24 | 1878 | 16 | 1872 | 19 | 99% |
| 14LH05-4.1\_68 | ME | 374.08 | 73.58 | 217.09 | 585.04 | 0.37 | 0.1139 | 0.0026 | 5.2852 | 0.1208 | 0.3350 | 0.0034 | 1863 | 43 | 1866 | 20 | 1862 | 17 | 99% |
| 14LH05-4.1\_74 | ME | 357.36 | 22.67 | 161.30 | 740.99 | 0.22 | 0.1137 | 0.0024 | 5.2787 | 0.1158 | 0.3348 | 0.0039 | 1861 | 38 | 1865 | 19 | 1861 | 19 | 99% |
| 14LH05-4.1\_76 | ME | 577.84 | 0.00 | 496.00 | 554.95 | 0.89 | 0.1101 | 0.0026 | 4.9548 | 0.1197 | 0.3248 | 0.0039 | 1811 | 42 | 1812 | 20 | 1813 | 19 | 99% |
| 14LH05-4.1\_83 | ME | 607.24 | 84.09 | 482.57 | 640.48 | 0.75 | 0.1153 | 0.0031 | 5.4540 | 0.1407 | 0.3394 | 0.0038 | 1885 | 48 | 1893 | 22 | 1884 | 18 | 99% |
| 14LH05-4.1\_90 | ME | 1150.04 | 72.40 | 560.66 | 2277.01 | 0.25 | 0.1180 | 0.0026 | 5.6787 | 0.1330 | 0.3481 | 0.0035 | 1928 | 40 | 1928 | 20 | 1926 | 17 | 99% |
| 14LH05-4.1\_92 | ME | 1351.22 | 34.38 | 999.05 | 1859.81 | 0.54 | 0.1161 | 0.0023 | 5.4702 | 0.1159 | 0.3414 | 0.0039 | 1898 | 35 | 1896 | 18 | 1894 | 19 | 99% |
| 14LH05-4.1\_93 | ME | 1423.35 | 0.00 | 1191.29 | 1513.17 | 0.79 | 0.1149 | 0.0023 | 5.3635 | 0.1170 | 0.3376 | 0.0039 | 1880 | 35 | 1879 | 19 | 1875 | 19 | 99% |
| 14LH05-4.1\_94 | ME | 371.76 | 0.00 | 307.57 | 370.39 | 0.83 | 0.1101 | 0.0026 | 5.0690 | 0.1303 | 0.3330 | 0.0038 | 1811 | 39 | 1831 | 22 | 1853 | 18 | 98% |
| 14LH05-4.1\_96 | ME | 1191.58 | 0.38 | 991.86 | 1094.44 | 0.91 | 0.1181 | 0.0025 | 5.6804 | 0.1220 | 0.3479 | 0.0033 | 1928 | 32 | 1928 | 19 | 1925 | 16 | 99% |
| 14LH05-4.1\_97 | ME | 810.84 | 0.00 | 710.66 | 611.66 | 1.16 | 0.1176 | 0.0025 | 5.6510 | 0.1232 | 0.3478 | 0.0034 | 1920 | 39 | 1924 | 19 | 1924 | 16 | 99% |
| 14LH05-4.1\_98 | ME | 1065.46 | 0.00 | 444.10 | 2452.93 | 0.18 | 0.1162 | 0.0024 | 5.4203 | 0.1130 | 0.3368 | 0.0031 | 1898 | 37 | 1888 | 18 | 1871 | 15 | 99% |

注：TotalPb：表示放射性成因Pb含量总和；CommonPb表示普通铅204Pb含量